

CLAIMS

What is claimed is:

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1. A combined slat and frame attachment system comprising:

a slat containing a support member placed longitudinally and securely fastened within said slat;

said support member having two or more pins extending outward from said slat in the same general direction and in a plane perpendicular to said support member;

said pins having steps;

said steps being cylindrical areas of narrowed diameter on said pins;

a frame having two or more limbs such that said slat is capable of being attached to and extends between said limbs;

said limbs each having attachment holes;

said attachment holes being aligned with and capable of receiving said two or more pins when said slat is attached to and extended between said limbs;

said attachment holes having receivers inserted in said attachment holes;

said receivers having bores extending in the same general direction as said pins;

said bores decreasing in diameter in the direction of insertion of said pins such that inserting said pins expands said receivers and tightens said receivers in said attachment holes in said limbs;

said receivers having retaining rings; and;

said retaining rings being attached to said receivers such that when said pins are inserted in said receivers said retaining rings fit into said steps on said pins thereby keeping said pins securely attached to said receivers thereby securely attaching said slat to said frame.

2. The system of claim 1 wherein said bores in said receivers are comprised of two or more receiver segments connected at one end with gaps between said segments such that said segments create an expandable cylindrical bore.

3. The system of claim 1 wherein said slat is molded urethane.
4. The system of claim 1 wherein said support member is injection molded structural nylon.
5. The system of claim 4 wherein said support member includes longitudinal ribbing.
6. The system of claim 3 wherein said support member is securely fastened within said slat by being encapsulated within said molded urethane.
7. A combined slat and frame attachment system comprising:
 - a molded urethane slat containing an injection molded structural nylon support member placed longitudinally and securely fastened within said slat;
 - said support member having two or more pins extending outward from said slat in the same general direction and in a plane perpendicular to said support member and said support member having longitudinal ribbing;
 - said pins having steps;
 - said steps being cylindrical areas of narrowed diameter on said pins;
 - a frame having two or more limbs such that said slat is capable of being attached to and extends between said limbs;
 - said limbs each having attachment holes;
 - said attachment holes being aligned with and capable of receiving said two or more pins when said slat is attached to and extended between said limbs;
 - said attachment holes having receivers inserted in said attachment holes;
 - said receivers having bores extending in the same general direction as said pins;
 - said bores in said receivers being comprised of two or more receiver segments connected at one end with gaps between said segments such that said segments create an expandable cylindrical bore;
 - said expandable cylindrical bore decreasing in diameter in the direction of insertion of

said pins such that inserting said pins expands said receivers and tightens said receivers in said holes in said limbs;

said receivers having retaining rings; and;

said retaining rings being attached to said receivers such that when said pins are inserted in said receivers said retaining rings fit into said steps on said pins thereby keeping said pins securely attached to said receivers thereby securely attaching said slat to said frame.